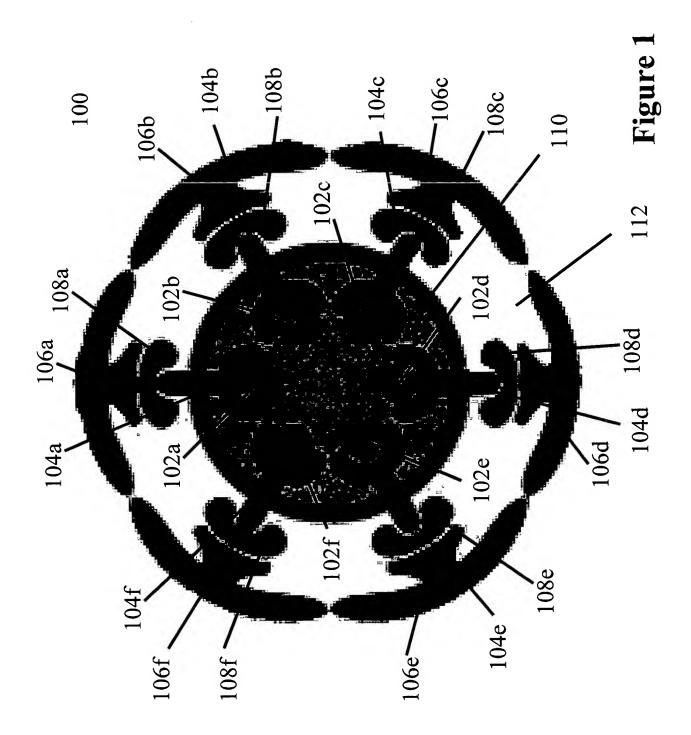
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Atty.: John V. Bianco Reg. No. 36,748
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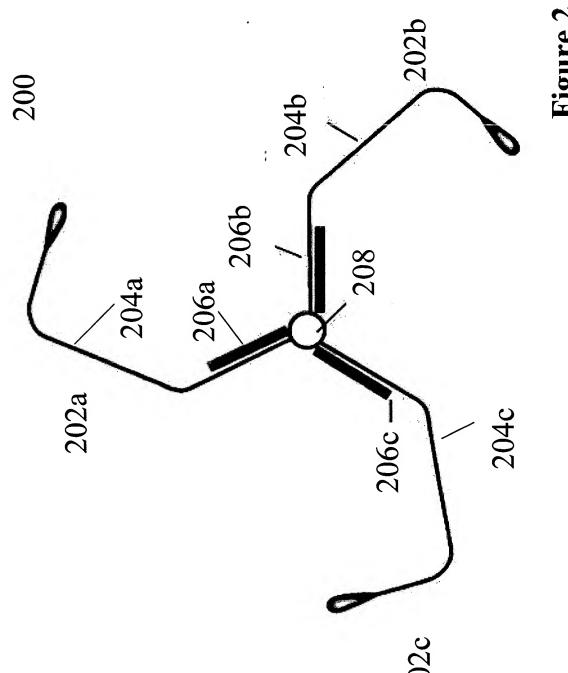
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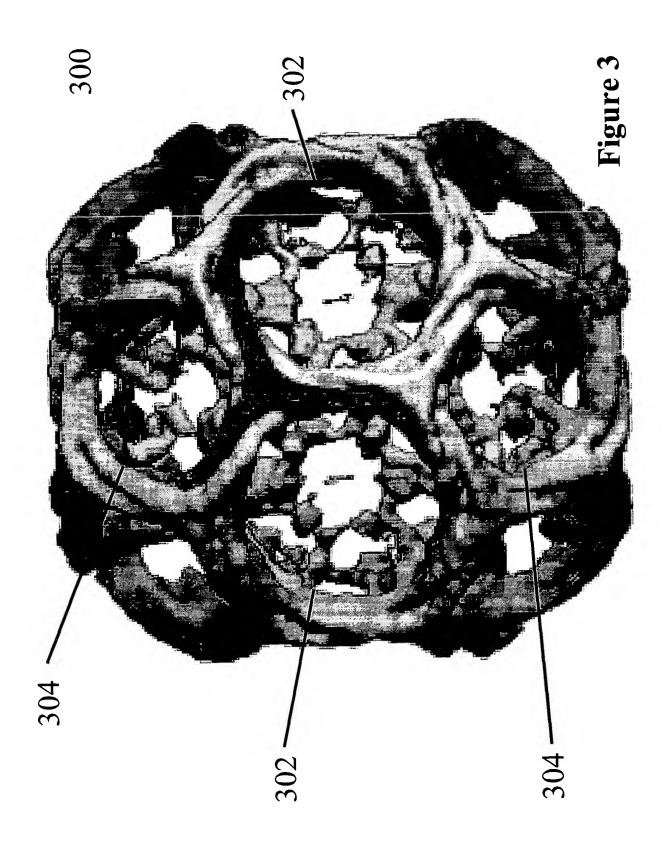
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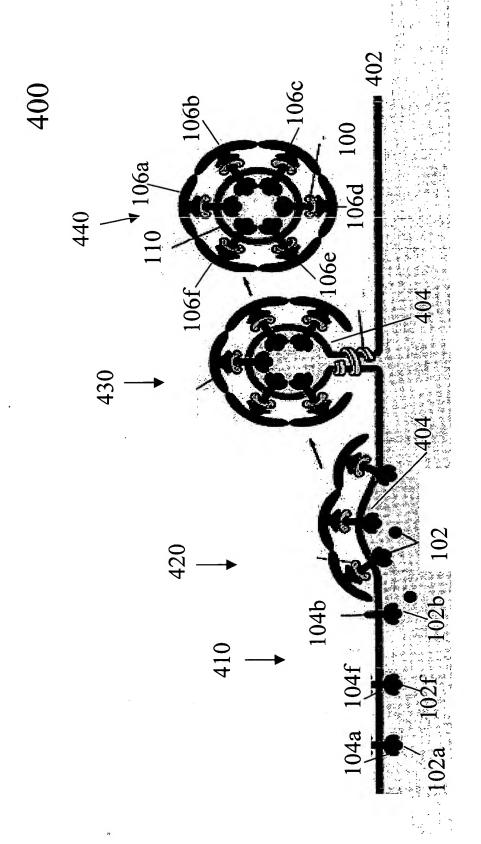
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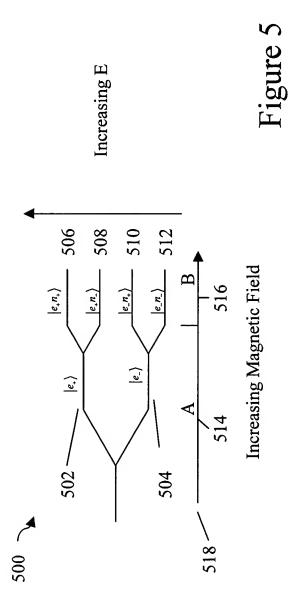
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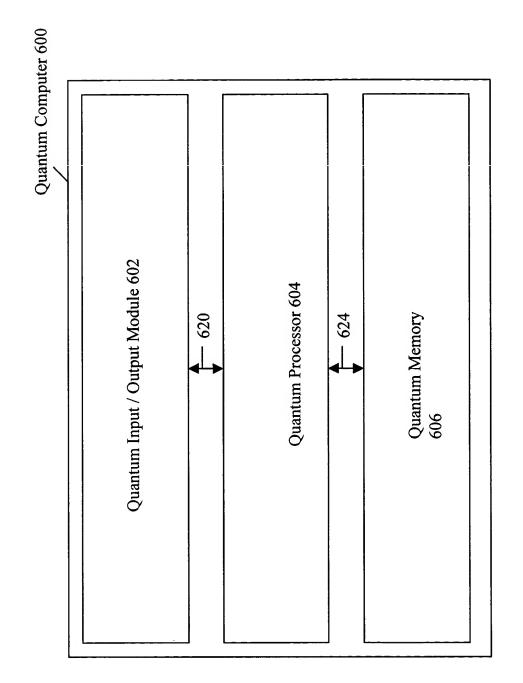
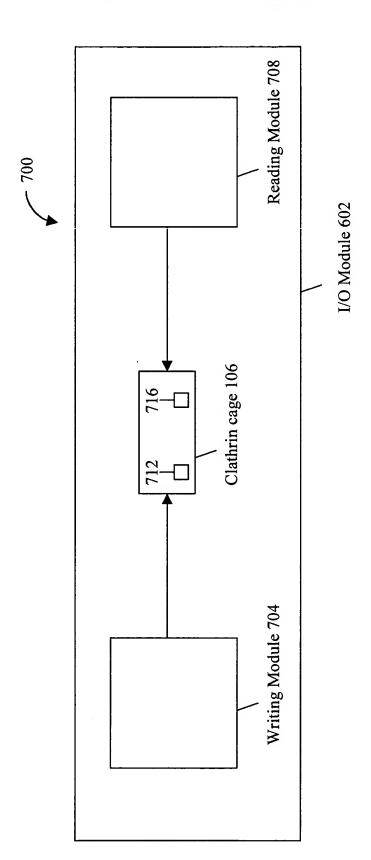


Figure 6

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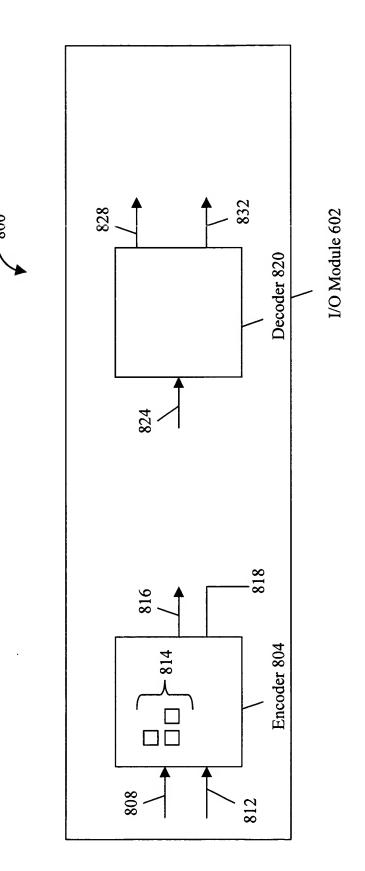


Figure 8

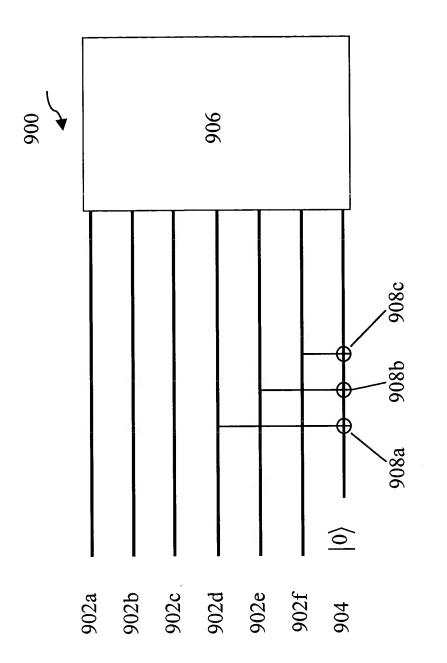
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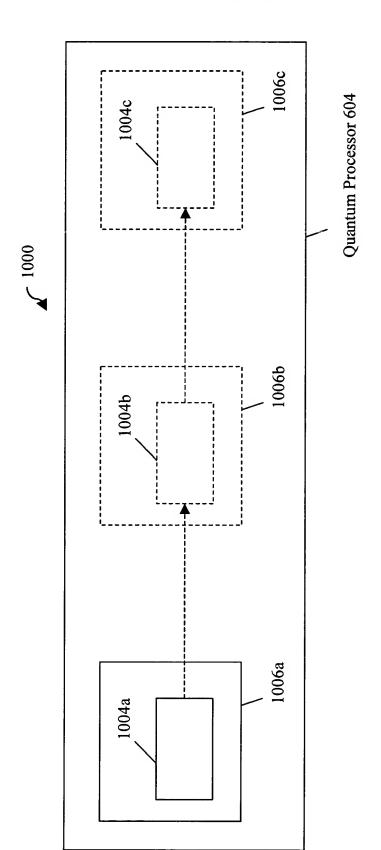
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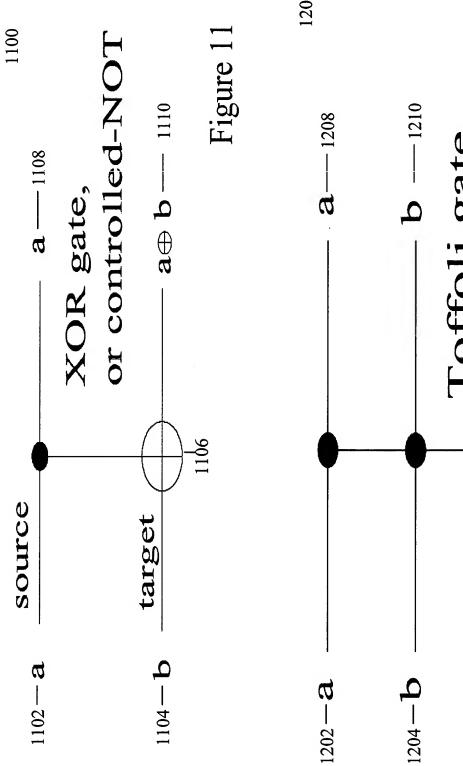


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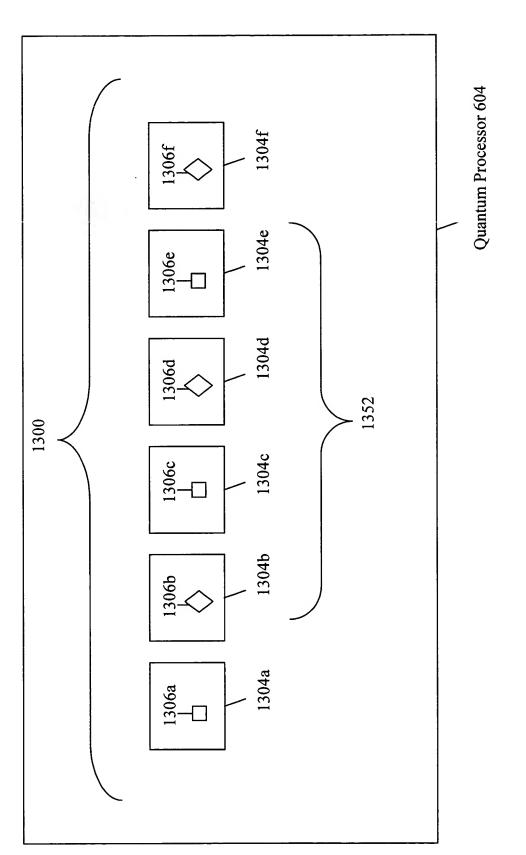


Figure 13

Perform a controlled-U operation on the Swap quantum information from nuclei Undo steps 1420, 1430, and 1440 Swap quantum information back to nuclear qubits of all the molecules Initialize qubit bus to ground state Tag those A molecules which will receive the unitary operation to inner electronic qubits Step 1410 Step 1460 Step 1430 Step 1450 Step 1420 Step 1440

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Figure 14

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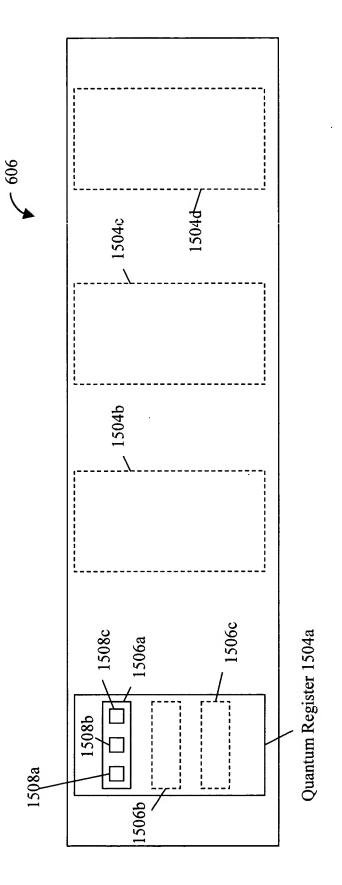


Figure 15

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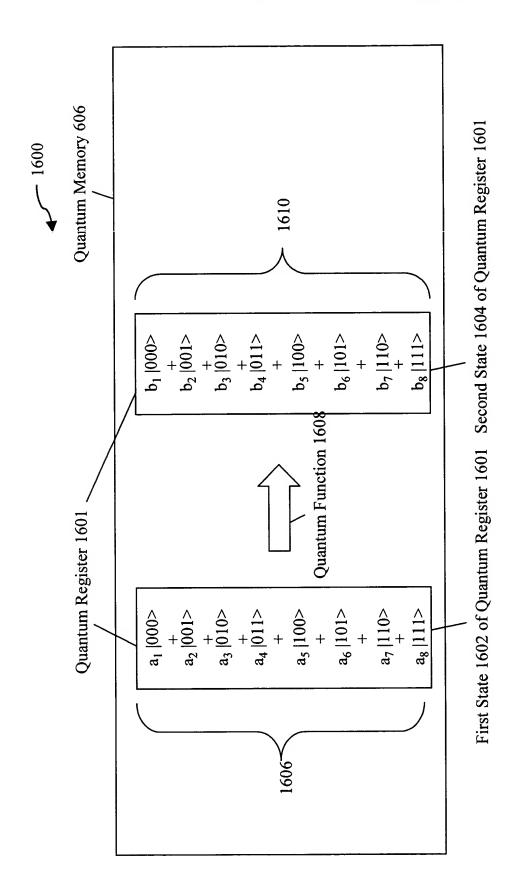


Figure 16

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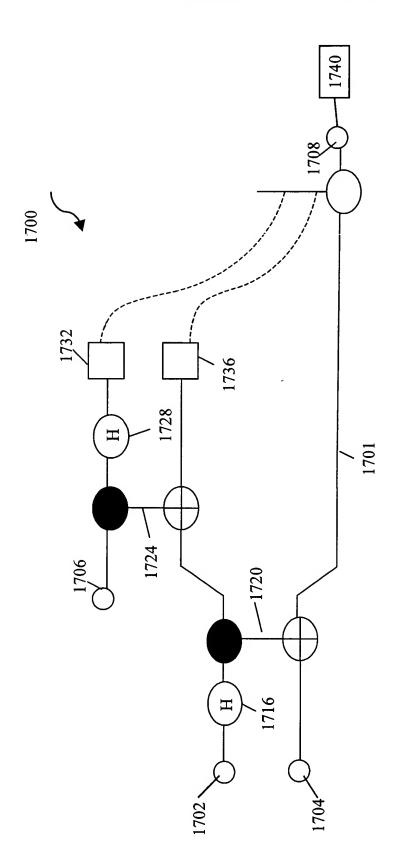


Figure 17